



North Carolina

**Asthma  
Resource Guide**







## Foreword:

Asthma has a significant impact on many North Carolinians, especially young children, senior adults, women, certain minority groups, and those with a very low socioeconomic status. This Resource Guide was carefully designed to provide useful asthma related information to these and all populations affected by asthma in North Carolina. The development of this Resource Guide was coordinated by the North Carolina Asthma Program, in collaboration with many of our partners, and was made possible through a grant from the Centers for Disease Control and Prevention (CDC). The Guide was designed to be used either in its entirety or as individual educational materials/handouts on asthma related topics. The Asthma Program welcomes your feedback as we move forward and update this Guide.

## Acknowledgements:

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The Asthma Alliance of North Carolina

The Albemarle Pediatric Asthma Coalition

Community Care of North Carolina

The North Carolina Division of Public Health,  
Immunization Branch

The North Carolina Division of Public Health,  
Tobacco Prevention and Control Branch



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A black and white photograph of several dandelion seed heads. The seed heads are in various stages of maturity, with some showing the characteristic fluffy pappus. The background is a soft-focus field of similar plants. A solid green rectangular box is positioned in the upper right quadrant, containing the text "Asthma Overview" in white.

## **Asthma Overview**





# What is Asthma?



## You can help control your asthma by:

- Knowing the early warning signs, including coughing, wheezing, shortness of breath, and/or chest tightness;
- Finding out what can trigger your asthma episode(s) and staying away from these triggers;
- Taking medicine as instructed;
- Talking with your doctor to develop an asthma action plan; and
- Making sure you keep regular well asthma visits with your doctor.

Asthma is a chronic disease that affects the lungs. **It is the most common long-term (chronic) disease in children.** **Asthma is likely to run in families.** It often causes coughing, wheezing, shortness of breath, and/or chest tightness. You will not outgrow asthma, but asthma can be controlled. Lungs often become sensitive to triggers, such as dust, fumes, pets, etc. When there is an asthma flare-up or episode, something is bothering your lungs.

## When asthma is under control...

- Symptoms like wheezing or coughing will improve.
- You will feel and sleep better.
- You can be involved in physical activities.
- You should not have to go to the hospital/emergency room due to an asthma episode.

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## SOURCES:

Centers for Disease Control and Prevention. Asthma- Basic Information. [www.cdc.gov/asthma/faqs.htm](http://www.cdc.gov/asthma/faqs.htm), September 2008.

U.S. Department of Health and Human Services, National Institutes of Health, National Heart, Lung, and Blood Institute. *Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma*, 2007.



# Common Asthma Triggers



## General Irritants

- Strong chemicals, aerosol sprays, cleaning products, pesticides
- Strong odors (air fresheners, scented candles, and colognes/perfumes)
- Environmental tobacco smoke (secondhand smoke)
- Smoke from burning wood (in fireplaces, wood stoves, etc.), leaves, or burning fields
- Kerosene heaters and un-vented gas stoves or heaters
- Paints, varnishes, and solvents containing volatile organic compounds (VOC)



## Allergic Triggers

*Avoid if allergic to these.*

- Mold and mildew (in bathroom, refrigerators, basements, water leaks, soil of house plants, etc)
- Warm-blooded animals (gerbils, cats, dogs, birds, etc)
- Pests (cockroaches, mice, and lady bugs)
- Dust mites present in stuffed animals, pillows, mattresses, comforters, and carpets
- Pollens (flowers, grasses, trees, weeds)



**NOTE:** These are just some of the known triggers. If you have concerns about other items that could cause an asthma episode, please discuss this with the parent, caregiver, or healthcare provider.

### SOURCES:

[www.cdc.gov/asthma/faqs.htm#triggers](http://www.cdc.gov/asthma/faqs.htm#triggers), June 2008.

[www.epa.gov/asthma/triggers.html](http://www.epa.gov/asthma/triggers.html), June 2008.

[www.niehs.nih.gov/health/topics/conditions/asthma/allergens.cfm](http://www.niehs.nih.gov/health/topics/conditions/asthma/allergens.cfm), June 2008.





# “Environmental Control Measures”

## Mold and Mildew

Mold grows on damp things such as shower curtains, bath items, tubs, basins and tiles. Moisture control is essential in limiting indoor mold growth. The moisture problem must be repaired. If the moisture problem is not gotten rid of, the mold growth will return.

### What you can do?

- Clean mold or mildew with a cleaning solution made up of detergent and water. Wear gloves when mixing or applying solution. After the area has been cleaned, make sure to dry it.
- Use exhaust fans or open a window in the bathroom when showering and the kitchen when cooking.
- Fix leaky plumbing or other sources of water (faucets, pipes, roof leaks, window leaks) as soon as possible.
- Dry damp or wet items within 1-2 days to avoid mold growth.
- Use air conditioning to cool the house; evaporative coolers are not recommended.
- When first turning on home or car air conditioners, leave the room or drive the car with windows open for several minutes to allow mold spores to disperse.



- Do not use a humidifier.
- Do not install carpet and/or wallpaper in rooms prone to dampness.
- After trying to correct the moisture in a closet, leaving the closet door open will improve ventilation and may solve the problem. Also consider leaving an incandescent light on in the closet to reduce the humidity level.
- Install and use exhaust fans in the kitchen, bathrooms, and damp areas.
- Vent bathrooms and clothes dryers to the outside.
- Remove decaying debris from the yard, roof, and gutters.
- Avoid raking leaves, mowing lawns, or working with peat, mulch, hay, or dead wood if you are allergic to mold spores.

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### SOURCES:

[www.epa.gov/asthma/triggers.html](http://www.epa.gov/asthma/triggers.html), Aug 2008.

[www.epa.gov/asthma](http://www.epa.gov/asthma), June 2008.

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# “Environmental Control Measures”

## Dust Mites

Dust mites are tiny bugs you can't see. They live in sheets, blankets, pillows, mattresses, box springs, soft furniture, carpets, and stuffed toys, such as stuffed animals.

### What you can do:

- Vacuum carpets, rugs and furniture often with a cleaner that has a High Efficiency Particulate Air (HEPA) filter or double-layered micro filter bags.
  - Remove carpet from bedrooms.
  - Cover mattresses, box springs, and pillows with dust proof (allergen-resistant) zippered covers.
  - Wash bedding (sheets, blankets and bedcovers) once per week in hot water and dry completely.
  - Choose washable stuffed toys; wash them often in hot water and dry them thoroughly.
  - Place small stuffed toys in freezer for 24 hours once a month. You must wash anything you freeze to remove the residue which will still cause allergies.
- Keep stuffed toys off beds.
  - Keep humidity low, ideally between 30-50% relative humidity. Humidity levels can be measured by hygrometers which are available at local hardware stores.
  - Use an air conditioner or dehumidifier.
  - Consider removing upholstered furniture if it cannot be properly cleaned.
  - Replace draperies with blinds or other window coverings that can be wiped clean.
  - Use a damp mop or rag to remove dust.
  - Keep people with asthma or respiratory problems out of the area when cleaning.



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### SOURCES:

[www.epa.gov/asthma/triggers.html](http://www.epa.gov/asthma/triggers.html), Aug 2008.

[www.epa.gov/asthma](http://www.epa.gov/asthma), June 2008.

[www.atsdr.cdc.gov/csem/asthma/treatment.html](http://www.atsdr.cdc.gov/csem/asthma/treatment.html), June 2008.





# “Environmental Control Measures”

## Secondhand Smoke

Asthma can be triggered by the smoke from the burning end of a cigarette, pipe, or cigar, or the smoke breathed out by a smoker. Choose not to smoke in the home or car, and don't allow others to do so. Simply smoking outside is not enough to limit the harm from tobacco smoke.

### What you can do:

- Change clothes after smoking while you are in the process of cutting down on the number of cigarettes.
- If you smoke, do not smoke near children or other nonsmokers.
- Seek support to quit smoking:
  - 1) Call the N.C. Tobacco Use Quit Line at 1-800-QUIT-NOW (1-800-784-8669) to talk to a trained quit coach for free and confidential assistance.
  - 2) Visit the website “Become an Ex” at: [www.becomeanex.org](http://www.becomeanex.org)



3) Medicines that are used in an effort to quit smoking can double the chances of quitting when used with quit support like the Quitline. Talk to a health care provider about the use of nicotine gum, patch, and other medicines to help in quitting smoking.

- Choose smoke-free home child care settings and social settings. All licensed child care centers are smoke-free.
- Seek smoke-free environments in restaurants, theaters, and hotel rooms.

### PARENTS:

**Pledge to make your home “smoke-free.”**

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#### SOURCES:

[www.tobaccopreventionandcontrol.ncdhhs.gov](http://www.tobaccopreventionandcontrol.ncdhhs.gov), June 2008.  
[www.epa.gov/asthma](http://www.epa.gov/asthma), June 2008.  
[www.nctobaccofreeschools.com](http://www.nctobaccofreeschools.com), Aug 2008.  
[www.smokefree.gov](http://www.smokefree.gov), Aug 2008.  
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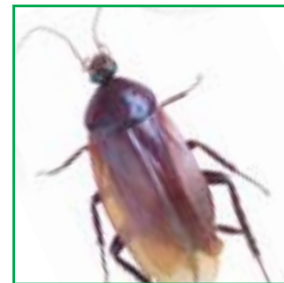
# “Environmental Control Measures”

## Pest Management

Use the integrated pest management (IPM) approach for extermination and lower toxic methods should be used. Integrated Pest Management (IPM) is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices.

### What you can do:

- Keep house clean and dry. Remove any moisture.
- Remove any left-over food items. Keep food in air-tight containers and clean dirty dishes.
- Use boric acid powder under stoves and other appliances. Wear face mask and gloves when applying powder.
- Use bait stations and gels.
- Use outdoor treatments as much as possible to prevent insects from entering your house.
- If those steps are unsuccessful, seek help from a professional, licensed exterminator rather than spraying chemicals yourself.
- Stay away from house for several hours after pesticides are applied.
- Avoid using liquid sprays inside the house, especially near places where children crawl, play, or sleep.
- Never attempt to use industrial-strength pesticide sprays that require dilution.



## Cockroaches

Cockroach body parts and droppings may trigger asthma attacks.

### What you can do

- Keep counters, sinks, tables, and floors clean and dry.
- Clean dishes, crumbs, and spills.
- Store food (including pet food) in air-tight containers.
- Cover trash cans.
- Limit spread of food around the house, especially in bedrooms.
- Restrict food consumption to the kitchen or dining room.
- Fix water leaks under sinks.
- Mop the kitchen floor and clean countertops at least once a week.
- Check for and seal/repair crevices outside the home that cockroaches may enter.
- Caulk or patch holes in walls, cupboards, and cabinets.

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### SOURCES:

[www.epa.gov/asthma/triggers.html](http://www.epa.gov/asthma/triggers.html), Aug 2008.

[www.epa.gov/asthma](http://www.epa.gov/asthma), June 2008.

[www.atsdr.cdc.gov/csem/asthma/treatment.html](http://www.atsdr.cdc.gov/csem/asthma/treatment.html), June 2008.



# “Environmental Control Measures”

## Animal Allergens

A warm-blooded animal’s urine, skin, and saliva may also trigger attacks.

### What you can do:

- Keep pets outside if possible, or find a new home for the pet.
- If you have a pet inside, keep it out of the bedroom and off the furniture.
- Vacuum carpets and furniture regularly using a cleaner with a HEPA filter or a double-layered micro-filter bag.
- Select low-dander pets in place of those with fur or feathers. It is not the fur, but the skin and saliva that are considered pet dander.



### If those options are not possible, the following steps may help reduce exposure:

- Enclose mattresses, box springs, and pillows with zippered plastic cases.
- Remove carpets.
- Do not vacuum when the person with asthma is at home or in the room.
- Keep pets off furniture.

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### SOURCES:

[www.epa.gov/asthma/triggers.html](http://www.epa.gov/asthma/triggers.html), Aug 2008.

[www.epa.gov/asthma](http://www.epa.gov/asthma), June 2008.

[www.atsdr.cdc.gov/csem/asthma/treatment.html](http://www.atsdr.cdc.gov/csem/asthma/treatment.html), June 2008.





# “Environmental Control Measures”

## Chemical Irritants

Chemical irritants found in some scented and unscented products in the house, such as cleaners, paints, varnishes, or solvents containing volatile organic compounds (VOC), adhesives, pesticides, cosmetics, or air fresheners, may make asthma worse.

### What you can do:

- Use these products less often, and make sure people with asthma are not around when you use the products. Also, consider trying different products.
- Take great care to follow the instructions on the label. Open windows or doors, and use an exhaust fan.
- Use low-odor or low volatile organic compounds (VOC) in paints, zero-VOC paint, and/or non-toxic or natural paint.



- Limit use of products and materials that give off strong odors and irritants, such as:
  - ☐ air fresheners, sprays, air wicks, scented candles, plug-ins
  - ☐ chalk dust
  - ☐ cleaning sprays and products
  - ☐ hair sprays
  - ☐ insect sprays
  - ☐ sawdust
  - ☐ paint vapors
  - ☐ smoke
  - ☐ strong perfumes
  - ☐ body powder

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### SOURCES:

[www.epa.gov/asthma](http://www.epa.gov/asthma), June 2008.

[www.atsdr.cdc.gov/csem/asthma/treatment.html](http://www.atsdr.cdc.gov/csem/asthma/treatment.html), June 2008.

[www.epa.gov/asthma/triggers.html](http://www.epa.gov/asthma/triggers.html), Aug 2008.



# “Environmental Control Measures”

## Indoor Air Pollution

The two best approaches to reducing indoor air pollution are source control and ventilation.

### What you can do:

- Limit indoor humidity and moisture.
- Use good housekeeping practices to reduce the presence of airborne particles.
- Install an exhaust fan close to the source of airborne contaminants or odors, and vent it to the outside.
- Properly ventilate the room in which fuel-burning appliances are used.
- Ensure that the doors of wood burning stoves fit tightly.
- Do not use un-vented space heaters or other appliances. If you have to, then open a window in the area.
- Ensure that fireplaces are properly vented so smoke escapes through the chimney.
- Never use a gas cooking appliance as a heating source.



- Open windows, especially when pollutant sources are in use (this option must be balanced against the concern of mold allergy or other plant allergens and outdoor air pollution).
- Check filters regularly, and change them when necessary.

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### SOURCES:

[www.epa.gov/asthma/triggers.html](http://www.epa.gov/asthma/triggers.html), Aug 2008.

[www.epa.gov/asthma](http://www.epa.gov/asthma), June 2008.

[www.atsdr.cdc.gov/csem/asthma/treatment.html](http://www.atsdr.cdc.gov/csem/asthma/treatment.html), June 2008.



# “Environmental Control Measures”

## Outdoor Air Pollution

Outdoor air pollution, especially ozone and particulate matter, can increase asthma symptoms. There are many ways to limit exposure to outdoor air pollution.

### What you can do:

- Monitor air quality and pollen levels, and indoors when pollutants are high.
- Avoid contact with vehicle exhaust gases and particulates (such as student exposure to idling school buses).
- Consider upgrading to a MERV 8 or better filter. MERV, or Minimum Efficiency Reporting Value, is a number from 1 to 16 that is relative to an air filter's effectiveness. The higher the MERV, the better the air filter is at removing particles. Consult a contractor familiar with your heating, ventilation, and air conditioning system before upgrading to a more efficient filter.



- If possible, move to a less polluted location.
- Schedule outdoor activities for times when ozone levels are lowest, typically in the morning.

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### SOURCES:

[www.epa.gov/asthma/triggers.html](http://www.epa.gov/asthma/triggers.html), Aug 2008.

[www.epa.gov/asthma](http://www.epa.gov/asthma), June 2008.

[www.atsdr.cdc.gov/csem/asthma/treatment.html](http://www.atsdr.cdc.gov/csem/asthma/treatment.html), June 2008.



# “Environmental Control Measures”

## Nitrogen Dioxide

Nitrogen dioxide is an odorless gas that can be an asthma trigger for some people. It can irritate the eyes, nose, and throat and may cause shortness of breath. This gas can come from the use of appliances that burn fuels, such as gas, wood, and kerosene.

### What you can do:

- If possible, use fuel-burning appliances that are vented outside. Always follow the manufacturer’s instructions on how to use these appliances.
- Gas cooking stoves: Never use these to keep you warm or to heat the house. If you have an exhaust fan, use it when you cook.
- Un-vented kerosene or gas space heaters: Use the proper fuel and keep the heater adjusted the right way. Open a window slightly or use an exhaust fan.
- Wood stoves: Make sure the doors are tight-fitting. Follow the maker’s instructions for starting, burning, and putting out the fire.



- Fireplaces: Always open the chimney smoke outlet so that the smoke can escape through the chimney.

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### SOURCES:

[www.epa.gov/asthma/triggers.html](http://www.epa.gov/asthma/triggers.html), Aug 2008

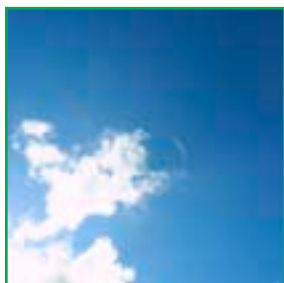
[www.epa.gov/asthma](http://www.epa.gov/asthma), June 2008

[www.atsdr.cdc.gov/csem/asthma/treatment.html](http://www.atsdr.cdc.gov/csem/asthma/treatment.html), June 2008





# The Air Quality Index



AQI INDEX VALUE	THE AIR	COLOR
0 – 50	Good	Green
51 - 100	Moderate	Yellow
101 - 150	Unhealthy for Sensitive Groups	Orange
151 - 200	Unhealthy	Red



The Air Quality Index (AQI) helps you to understand what the air quality forecast for each day means for your health. It helps you know if the air outside is clean or polluted (dirty).

The AQI uses numbers from 0-500 to decide the color forecast for each day. The less clean the air, the larger the forecast number. A green forecast means the best air quality, and a red forecast means the most unhealthy air quality. Yellow means moderate air quality; and during orange days, it can be unhealthy for sensitive groups to be outside, especially children, older adults, and people with asthma. On red days, all people should limit outdoor activities. See table below.

North Carolina forecasts are developed each day by staff weather experts at the NC Division of Air Quality. Forecasts are available for these “areas” in North Carolina: Asheville Ridge Tops, Asheville Valleys, Charlotte, Fayetteville, Hickory, Rocky Mount, Triad, and Triangle.

More information about the air quality index is available from the NC Division of Air Quality’s web site, <http://daq.state.nc.us>. You can even sign up to receive air quality forecasts every day on your email or cell phone at [www.enviroflash.info](http://www.enviroflash.info).

## SOURCES:

US Environmental Protection Agency, [www.airnow.gov](http://www.airnow.gov)

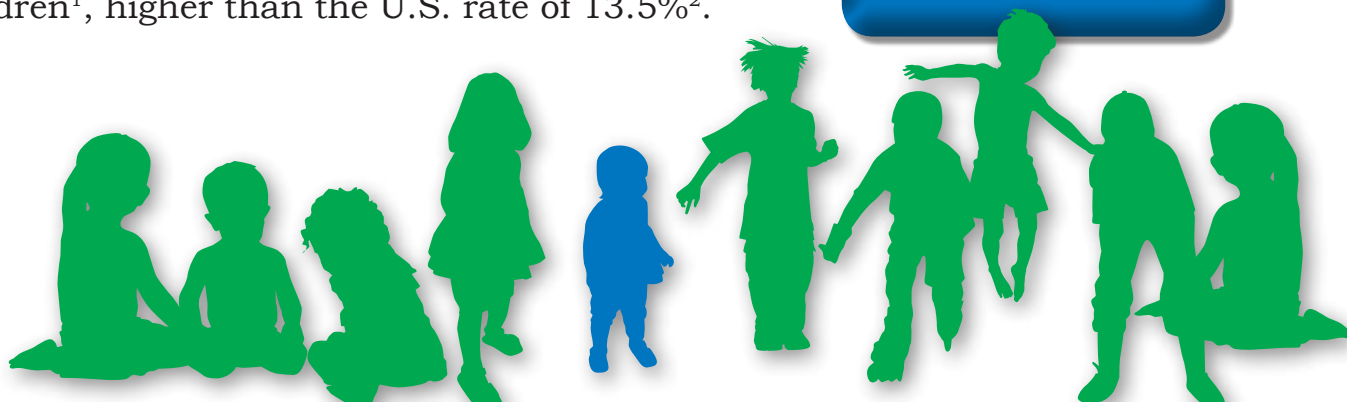
NC Division of Air Quality, <http://daq.state.nc.us>



# Asthma IN NORTH CAROLINA

- 217,333 children under the age of 18 in North Carolina have asthma. That's 9.8% of all N.C. children<sup>1</sup>, higher than the U.S. rate of 9.3%<sup>2</sup>.
- 348,176 children in North Carolina have been diagnosed with asthma. That's 15.7% of N.C. children<sup>1</sup>, higher than the U.S. rate of 13.5%<sup>2</sup>.

1 out of every 10 North Carolina children has asthma



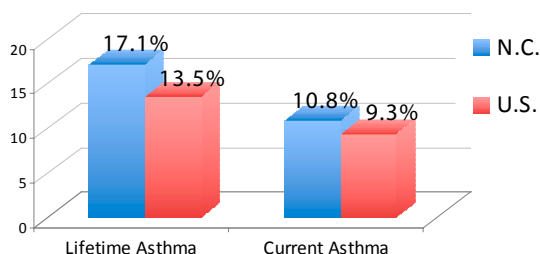
## Asthma is the most common chronic disease in children.

Asthma, a major chronic illness among school-age children, is the leading cause of school absenteeism. Asthma has been the leading, chronic health condition reported by N.C. schools, affecting 83,440 students in the 2006-2007 school year.<sup>3</sup>

**In 2007, approximately 59,115 N.C. children visited emergency departments due to asthma** (27.2% of children with current asthma)<sup>1</sup>. In 2006, there were 2,867 child hospitalizations due to asthma in North Carolina.<sup>4</sup>



Percentage of children who have asthma, N.C. and U.S. (2006)



**N.C.'s rates of lifetime and current childhood asthma continue to be higher than the U.S. averages.**



1 out of every 5 N.C. adults with asthma has visited the emergency room

- 110,493 N.C. adults have reported visiting the emergency room due to asthma, or 20.7% of those with current asthma.<sup>5</sup>



“Poorer asthma control is associated with **substantial quality of life impairment**. Asthma control predicts quality of life, even after taking into account asthma severity and lung function.”<sup>7</sup>

## Asthma in Adults

- 828,046 adults in North Carolina have had asthma, or approximately 12.1% of adults.<sup>5</sup>
- 533,781 adults in North Carolina currently have asthma. That’s 7.8% of all adults in the state<sup>5</sup>, compared with the U.S. rate of 8.2%.<sup>6</sup>
- In 2006, there were 7,655 hospitalizations of adults due to asthma in North Carolina.<sup>4</sup>
- Between 1999 and 2007, asthma caused more than 1,000 deaths in North Carolina. Twice as many of those deaths occurred among adult women than in men<sup>4</sup>.



State of North Carolina  
Beverly Eaves Perdue, Governor  
Department of Health and Human Services  
Lanier M. Cansler, Secretary  
Division of Public Health  
North Carolina Asthma Program  
[www.ncdhhs.gov](http://www.ncdhhs.gov)  
N.C. DHHS is an equal opportunity  
employer and provider.  
04/09

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1. North Carolina Child Health Assessment and Monitoring Program (CHAMP) Survey, N.C. State Center for Health Statistics, N.C. Department of Health and Human Services (2007).
2. Bloom B, Cohen RA. Summary Health Statistics for U.S. Children: National Health Interview Survey, 2006. National Center for Health Statistics. Vital Health Stat 10(234). 2007.
3. N.C. Annual School Health Services Report: 2006-2007. ([www.nchealthyschools.org/docs/data/reports/2006-07eoy.pdf](http://www.nchealthyschools.org/docs/data/reports/2006-07eoy.pdf)). Accessed January 26, 2009.
4. State Center for Health Statistics, N.C. Department of Health and Human Services, (2008).
5. North Carolina Behavioral Risk Factor Surveillance System (BRFSS) Survey, State Center for Health Statistics, N.C. Department of Health and Human Services (2007).
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# **Asthma Management**





# Asthma Action Plan

Name: \_\_\_\_\_ DOB: \_\_\_\_\_

Doctor: \_\_\_\_\_ Date: \_\_\_\_\_

Phone for Doctor or Clinic: \_\_\_\_\_

Predicted/Personal Best Peak Flow Reading: \_\_\_\_\_

## Asthma Triggers

*Try to stay away from or control these things:*

- |  |   |
|--|---|
| <input type="checkbox"/> Exercise        | <input type="checkbox"/> Smoke, strong odors or spray |
| <input type="checkbox"/> Mold            | <input type="checkbox"/> Colds/Respiratory infections |
| <input type="checkbox"/> Chalk dust/dust | <input type="checkbox"/> Carpet                       |
| <input type="checkbox"/> Pollen          | <input type="checkbox"/> Change in temperature        |
| <input type="checkbox"/> Animals         | <input type="checkbox"/> Dust mites                   |
| <input type="checkbox"/> Tobacco smoke   | <input type="checkbox"/> Cockroaches                  |
| <input type="checkbox"/> Food _____      | <input type="checkbox"/> Other _____                  |

## 1. Green – Go

- Breathing is good.
- No cough or wheeze.
- Can work and play.



Or Peak Flow \_\_\_\_\_ to \_\_\_\_\_ (80-100%)

Use these controller medicines *every day* to keep you in the green zone:

<u>Medicine:</u>	<u>How much to take:</u>	<u>When to take it:</u>	<input type="checkbox"/> Home
			<input type="checkbox"/> School

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5-15 minutes before very active exercise, use ☐ Albuterol \_\_\_\_\_ puffs.

## 2. Yellow – Caution



Coughing



Wheezing



Tight Chest



Wakes up at night

Or Peak Flow \_\_\_\_\_ to \_\_\_\_\_ (50-80%)

*Keep using controller green zone medicines everyday.*

*Add these medicines to keep an asthma attack from getting bad:*

<u>Medicine</u>	<u>How much to take</u>	<u>When to take it</u>
Albuterol	<input type="checkbox"/> 2 puffs by inhaler	<input type="checkbox"/> May repeat every
or	<input type="checkbox"/> 4 puffs by inhaler	20 min up to 3 doses
_____	<input type="checkbox"/> with spacer, if available	in first hour, if needed
	<input type="checkbox"/> by nebulizer	

If symptoms **DO NOT** improve after first hour of treatment, then go to **red zone**.

If symptoms **DO** improve after first hour of treatment, then continue:

Albuterol	<input type="checkbox"/> 2 puffs by inhaler	<input type="checkbox"/> Every 4 - 8 hours
or	<input type="checkbox"/> 4 puffs by inhaler	for _____ days
_____	<input type="checkbox"/> with spacer, if available	
	<input type="checkbox"/> by nebulizer	

_____, _____ times a day for _____ days	<input type="checkbox"/> Home
(oral corticosteroid) (how much)	<input type="checkbox"/> School

*Call your doctor if still having some symptoms for more than 24 hours!*

## 3. Red – Stop – Danger

- Medicine is not helping.
- Breathing is hard and fast.
- Nose opens wide.
- Can't walk.
- Ribs show.
- Can't talk well.



Or Peak Flow \_\_\_\_\_ (Less than 50%)

*Call your doctor and/or parent/guardian NOW!*

*Take these medicines until you talk with a doctor or parent/guardian:*

<u>Medicine:</u>	<u>How much to take:</u>	<u>When to take it:</u>
Albuterol	<input type="checkbox"/> 2 puffs by inhaler	<input type="checkbox"/> May repeat every
or	<input type="checkbox"/> 4 puffs by inhaler	20 minutes until
_____	<input type="checkbox"/> with spacer, if available	you get help
	<input type="checkbox"/> by nebulizer	
_____, _____ times a day for _____ days	<input type="checkbox"/> Home	
(oral corticosteroid) (how much)	<input type="checkbox"/> School	

*Call 911 for severe symptoms, if symptoms don't improve, or you can't reach your doctor and/or parent/guardian.*

Physician Signature \_\_\_\_\_ Date \_\_\_\_\_ Phone \_\_\_\_\_


WHITE – PATIENT

YELLOW – CHART

PINK – SCHOOL



# ASTHMA ACTION PLAN FOR PRESCHOOL CHILDREN YEAR 20\_\_ - 20\_\_

	Name _____	DOB _____
	Parent/Guardian _____	
	Ph (Home) _____	Ph (Cell) _____
	Doctor _____	

CATEGORY OF SEVERITY    ☐ MILD    ☐ MODERATE    ☐ SEVERE    ☐ EXERCISE-INDUCED ASTHMA

GO		Use Controller Medicines at Home Every Day		
Green Zone	<b>Child is feeling well</b> <ul style="list-style-type: none"> <li>Breathing is good</li> <li>No cough or wheeze</li> <li>Sleeps through the night</li> <li>Can play</li> </ul>	MEDICINE/ROUTE	HOW MUCH	HOW OFTEN/WHEN

CAUTION		Rescue Medicine		
Yellow Zone	<b>Child is not feeling well</b> <ul style="list-style-type: none"> <li>COUGHING day or night</li> <li>Wheezing—hard or noisy breathing</li> <li>Vomiting after coughing</li> </ul>	MEDICINE/ROUTE	HOW MUCH	HOW OFTEN/WHEN
	<b>Other symptoms</b> <ul style="list-style-type: none"> <li>Trouble breathing</li> <li>Trouble eating</li> <li>Cranky and tired</li> </ul>	Rescue medicine: _____  <input type="checkbox"/> Nebulizer <input type="checkbox"/> Mask <input type="checkbox"/> Spacer <input type="checkbox"/> Inhaler	<input type="checkbox"/> Give a nebulizer treatment  <input type="checkbox"/> Give _____ puffs of metered dose inhaler	Stay with child and keep child quiet for 15 minutes  Encourage child to drink fluids  If symptoms not improved, may repeat rescue medicine ONCE  Call parent to report child had breathing problem  <b>IF STILL HAVING TROUBLE, FOLLOW RED ZONE</b>
	<b>Other Signs</b> <ul style="list-style-type: none"> <li>Change in sleep pattern</li> <li>Not playing as usual</li> <li>Reaction to asthma trigger</li> </ul>			

**NOTE:** Parent should contact the doctor if child needs rescue med >2 times/wk to see if a medication change is necessary.

STOP		Get Help from a Doctor		
Red Zone	<b>Child is very sick</b> <b>Danger-Get Help!</b> <ul style="list-style-type: none"> <li>Medicine is not helping</li> <li>Constant cough</li> <li>Working hard to breathe</li> <li>Trouble walking or talking</li> <li>Child looks very sick</li> </ul>	MEDICINE/ROUTE	HOW MUCH	HOW OFTEN/WHEN
		Rescue medicine: _____  <input type="checkbox"/> Nebulizer <input type="checkbox"/> Mask <input type="checkbox"/> Spacer <input type="checkbox"/> Inhaler	<input type="checkbox"/> Give a nebulizer treatment  <input type="checkbox"/> Give _____ puffs of metered dose inhaler	Give rescue medicine NOW  Watch child closely  Repeat rescue medicine in 15 minutes if still in distress
	<b>Call parent. If not better, call doctor.</b> <b>IF IN SEVERE DISTRESS, CALL 911.</b>			

Doctor signature: \_\_\_\_\_ Date \_\_\_\_\_

I hereby release the local School Board and their agents and employees and the child care providers from any liability that may result from my child taking the prescribed medication. I give permission for my child to receive medications and for health care providers to exchange information regarding the care of my child. I agree to provide rescue medication to be kept at the child care center in case of emergency.

Parent/Guardian: \_\_\_\_\_ Date \_\_\_\_\_

WHITE—CHILD CARE PROVIDER

YELLOW—PATIENT/PARENT

PINK—DOCTOR



# Peak Flow



## How do I use a peak flow meter?

- Make sure that the scale reads zero (0)
- Stand up, if you are able
- Take a really deep breath
- Put the meter in your mouth, and close your lips on the mouthpiece
- Blow out as hard and as fast as you can (for one or two seconds)!
- Write down your peak flow number (from the scale on the meter)
- Repeat this process two more times, and write down the highest of your three readings in your peak flow chart
- You should keep a peak flow chart to compare your peak flows from one day to the next (more severe asthma may require several peak flow readings per day).

## What is a peak flow meter?

A peak flow meter is a simple hand held device that measures your air flow, or how well you are able to push air out of your lungs. Peak flow meters help you and your physician measure the severity of your asthma. Peak flow will drop as your asthma symptoms (like coughing and wheezing) get worse and even before they start. The earlier that your asthma warning signs are detected, the earlier you can get help!

## What is a “normal” peak flow reading?

Normal peak flow rates are based on your age, height, sex, and race. Your doctor will work with you to get your personal best peak flow and to determine what a “normal” rate is for you or your child. Your doctor will also help you develop a plan for managing your asthma based upon peak flow readings.

## How do I care for my peak flow meter?

Your peak flow meter should be properly cleaned. If dirt, particles, or germs gather in the meter, they can make your peak flow readings inaccurate. Be sure to follow the cleaning and care instructions (usually including cleaning with mild detergent and hot water) that come with your peak flow meter.

***\*Your doctor can provide you with more information on peak flow!***

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### SOURCES:

American Academy of Allergy, Asthma, and Immunology (AAAAI),  
[www.aaaai.org/patients/publicedmat/tips/whatispeakflowmeter.stm](http://www.aaaai.org/patients/publicedmat/tips/whatispeakflowmeter.stm)

American Lung Association, [www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=22586](http://www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=22586)



# Spacers



## Using Your Spacer

- Attach the spacer to your prescribed inhaler, as directed
- Breathe out
- Place the spacer's mouthpiece into your mouth
- Press down on the inhaler
- Breathe in slowly (for about 3-5 seconds)
- Hold your breath for about 10 seconds

## What is a Spacer?

A spacer is a device that attaches to the end of your inhaler. A spacer helps the medicine inside the inhaler get into your lungs, instead of just into your mouth.

## Notes About Your Spacer

- It is important to clean and care for your spacer. Follow the directions that come in the package.
- Masks are available for young children to use with their spacers.
- If you have questions or problems with your spacer, contact your (or your child's) physician!

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### SOURCE:

National Jewish Health,  
[www.nationaljewish.org/healthinfo/medications/lung-diseases/devices/metered-dose/mdi-spacers.aspx](http://www.nationaljewish.org/healthinfo/medications/lung-diseases/devices/metered-dose/mdi-spacers.aspx)









# Are **you** ready to quit using tobacco?



**1-800-QUIT-NOW**  
1 - 8 0 0 - 7 8 4 - 8 6 6 9

**NC Tobacco Use Quitline**  
**Talk with an expert Quit Coach**  
**1-800-784-8669**

8:00 a.m. — 3:00 a.m., 7 days a week  
Quit Coaches available in many languages.  
All calls are free and confidential.  
TTY 1-877-777-6534

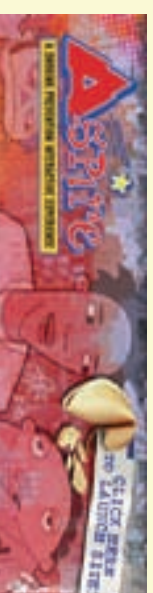
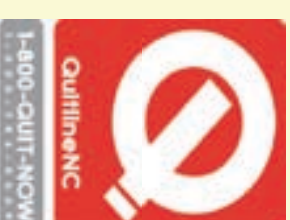


Call us. **You can quit.**  
**We can help.**



# Resources for Quitting Tobacco

- **NC Tobacco Use Quitline**  
**1-800-QUIT-NOW**  
**1-800-784-8669**  
Adults and youth may enroll for free & confidential quit coaching, 8 a.m. - 3 a.m., 7 days a week, English & Spanish
- **Become an Ex** **[www.becomeanex.com](http://www.becomeanex.com)**  
Interactive and edgy web site for adults - "Relearn your life" without cigarettes. Written by ex-smokers.
- **ASPIRE** **[www.mdanderson.org/aspire](http://www.mdanderson.org/aspire)**  
A smoking cessation interactive experience for teens
- **You Quit Two Quit** **[www.youquittwoquit.com](http://www.youquittwoquit.com)**  
Information web site for women who are pregnant or post partum and healthcare professionals who care for them
- **My Last Dip** **[www.mylastdip.com](http://www.mylastdip.com)**  
An on-line program for ages 14 - 25 who use spit or smokeless tobacco





# IMPORTANT INFORMATION

## for Patients with Asthma What to do during Flu Season?



**Make an appointment  
to get  
vaccinated  
today!**

### Why is getting a cold or the flu serious when you have asthma?

When you have asthma, the airways that carry air into your lungs tend to be swollen and irritated. If you get sick with a cold or the flu, the coughing, sneezing, and other symptoms of your illness put extra stress on your airways. Since your airways are already irritated and swollen from having asthma, this extra stress from having a cold or the flu can lead to serious breathing problems or to a serious infection such as pneumonia or bronchitis.

### What do I do if I feel sick?

Watch for complications with your asthma and tell your doctor because your doctor can provide suggestions on how to monitor and manage your illness. Your doctor may also help keep your asthma under control by changing your asthma medicine while you are sick.

### How do I avoid a cold or the flu?

A cold and the flu are spread from person to person by close contact with someone who is infected. These viruses can also be spread through contact with items that a sick person has touched. To avoid the flu, get the flu shot every year. This is the best way to avoid being infected. Washing your hands and keeping your fingers away from your nose, mouth and eyes are good ways to avoid getting sick. Also, always cover your mouth and nose with a tissue or your arm when you cough or sneeze.

### Who should get a flu shot?

People with chronic diseases, such as asthma, should get the flu shot every year. Anyone in close contact or who lives with a person with asthma should also get the flu vaccine. This decreases the risk of getting the flu and spreading it within your house.

People with asthma should **not** get the nasal spray flu vaccine because of the increased risk of wheezing after the vaccination is administered. Instead, they should get the injectable flu vaccine (flu shot). The flu shot cannot give you the flu.

### When and where is the flu vaccine available?

The ideal time to get your flu shot is in the fall, but you can receive the vaccine anytime between October and March. It is best to get vaccinated as soon as the flu shot is available; however, it will still help if you get it later in the season. Contact your primary health care provider to schedule an appointment to get the flu vaccine. In North Carolina, you can find a flu clinic near you through the **Flu Clinic Finder's website at <http://www.thecarolinascenter.org/tcf/>.**





# Asthma Education Classes

## Caldwell County

- Classes offered the second Tuesday of every month (or as needed)
- Held at the Caldwell County Library Meeting Rooms
- This free monthly class covers the basics of Asthma Management to include the signs and symptoms of asthma, asthma triggers, controller medications, quick-relief medications, asthma action plans, and how to use a peak flow meter. This class is open to anyone with asthma or those who care for someone with asthma.
- **Contact:** Jessica Carter, (828) 426-8462, or [jcarter@caldwellcountync.org](mailto:jcarter@caldwellcountync.org)

## Gates County School Nurses and the American Lung Association of Virginia

- American Lung Association's Open Airways Program and Asthma 101 is offered to staff and students of Gates County Schools
- Six sessions in Open Airways and one session in Asthma 101
- Classes offered through a grant with Obici Hospital
- Dates and times arranged with school principals, usually in the spring
- **Contact:** Terri Watson, (252) 357-1611

## Pitt County Memorial Hospital Pediatric Asthma Services

- Classes offered in Pitt and Greene Counties – Home, School, Childcare, Physician Office visits

- Program provides services to children (up to age 18) who have asthma, their families, and the community on how to control and prevent asthma episodes. Services are free and include: education on asthma management; tools for asthma treatment; local support resources on asthma awareness.

- **Contact:** Lisa Johnson, (252) 847-6834, or [ljohnso@pcmh.com](mailto:ljohnso@pcmh.com)

## Rex Asthma Program

- Classes are offered throughout the school year, either before or after school
- Classes offered at Wake and Durham County Schools, in computer lab or media center.
- The Rex Asthma Program involves five to seven educational sessions for 30 to 45 minutes. It is a no-cost asthma education and self management program. The program helps children reach their asthma goals by sending trained asthma educators from Rex Hospital to deliver this education program in schools.
- **Contact:** Jackie Choman, (919) 784-7504, or your school nurse

## WakeMed Children's Asthma Program

- Monthly asthma education sessions (call for times)
- Child must have a diagnosis of asthma and a current physician.
- Program is free to all!
- If more education is needed, participants can enroll in (free) asthma education program
- For more information, contact Keri Erickson at (919) 350-6944





# Asthma Camps

## Camp NoWheezin

- 2009 held on June 15 – 17
- United States Coast Guard Base, Elizabeth City, NC
- Camp NoWheezin is a three day camp for seven, eight, and nine year olds in the Albemarle area. The cost of the camp is \$25 per child. Scholarships are available. The number of children is limited to thirty. Camp activities include swimming, arts and crafts, sports, and asthma education. Nurses, respiratory therapists, physicians, and other professionals are present throughout the three day camp.
- **Contact:** Arina Boldt  
Albemarle Hospital,  
Director of Community Outreach  
(252) 284-4665

## No Wheeze Asthma Camp

- Yearly, third week of July: Monday – Friday, 8:15 a.m. – 4:30 p.m.
- Dover Foundation Family YMCA, Cherryville Road, Shelby, NC
- Sponsored by the Cleveland County Asthma Coalition, the Dover Foundation Family YMCA, Cleveland Regional Medical Center Respiratory Therapy Department, NC Cooperative Extension, and the Cleveland County Health Department.
- No Wheeze Asthma Camp uses the American Lung Association's Open



Airways curriculum. No Wheeze is a day camp, targeting children between eight and twelve years of age. Asthma education is given for two hours in the mornings, and then children are mainstreamed into regular YMCA day camp activities. Two registered nurses are available at all times, and the physician in charge is Dr. Christopher Cerjan. Cost is \$85 per camper. Financial aid is available.

- **Contact:** Pam Ellwood,  
Camp Coordinator  
(704) 484-5182

## Camp Coast Fall Retreat

- Friday, October 2 – Sunday, October 4, 2009
- Camp Don Lee – Arapahoe, NC
- Camp Coast is a camping program that serves children with asthma and their families. The fall retreat is designed to help parents and children improve their understanding of asthma and to enhance the lives of children who are coping with the condition. Campers enjoy a variety of recreational activities like canoeing, arts and crafts, hayrides, sailing, and swimming. The target audience is children five years of age and older, along with their families.
- [www.campcoast.uhseast.com](http://www.campcoast.uhseast.com)

CONTINUED

## Asthma Camps, cont.

- **Contact:** Lisa Johnson,  
Pediatric Asthma Services  
(252) 847-6834, lcjohnso@pcmh.com

### Camp Air Adventure

- Dates vary from year to year, but usually held in June
- Campus of Lenoir Rhyne University, Hickory, NC
- Camp Air Adventure focuses on asthma education and activities and is staffed by RNs and respiratory therapists. A physician also provides medical oversight.
- **Contact:** Cheri Burton,  
(828) 315-5021

### Camp Open Airways

- 4 day, day camp offered in June of each year, 7:30 – 3:30 each day
- Held at the YMCA in Kannapolis, NC
- Camp Open Airways is hosted by Carolinas Medical Center Northeast and is sponsored by the Jeff Gordon Foundation and the Jeff Gordon Children's Hospital, Community Care Plan, and the Speedway Children's Charities.
- Two respiratory therapists, a pediatric pulmonologist, and four RNs are on staff at all times with nursing and respiratory students also helping teach and play with the children.
- **Contact:** Wanda Black,  
(704) 403-4047

### Camp Challenge

- Overnight, weeklong camp for children with asthma or diabetes
- Held once a year in June
- Camp Oak Hill, Oxford, NC

- Campers participate in regular camp activities, with the addition of asthma or diabetes education. Staff includes nurses, physicians, and respiratory therapists. Camp philosophy is to create mental, physical, and spiritual development with Christian values.
- Camp website is [www.campoakhill.org](http://www.campoakhill.org).
- **Contact:** Keri Erickson,  
(919) 350-6944  
Kim Patterson, (919) 782-2888

### Asthma Day Camp of Cumberland County

- Offered yearly in July (one day)
- Time: 8:00 a.m. – 12 noon
- J.P. Riddle Stadium, Fayetteville Swamp Dogs Baseball Facility
- The Asthma Day Camp of Cumberland County is sponsored by the Cumberland County Asthma Action Group with support from area businesses and organizations. The Camp is an opportunity for children diagnosed with asthma, ages 8 to 12 years old, to participate in fun activities while learning about their asthma. The camp is staffed with medical professionals, including physicians, nurses, respiratory therapists and EMS providers to safely monitor the kids as they go through 4 different activity stations. The camp is free and is open to 40 children who are selected by an application/health evaluation process. The 40 kids are divided into teams of 10, with one team physician and one team medical volunteer (RN, RT, etc). The parents also take advantage of some asthma education while the kids are having fun on the field.
- **Contact:** Holly Lawing, (910) 615-3185,  
[hlawing@capefearvalley.com](mailto:hlawing@capefearvalley.com)

A black and white photograph of tall grasses blowing in the wind against a cloudy sky. The grasses are in the foreground, and the sky is in the background. The text "Social Services for Asthma" is overlaid on the right side of the image.

# **Social Services for Asthma**





# How to Apply for Medicaid



## Mailing Your Application

If you are not able to apply in person, you may mail your completed Medicaid and Health Choice applications to your local DSS office. You may call 1-800-772-1213 and ask that an application be mailed to you, or you may visit [www.ncdhhs.gov/dma/medicaid/apply.htm](http://www.ncdhhs.gov/dma/medicaid/apply.htm) to download and print an application.

### SOURCE:

North Carolina Division of Medical Assistance (NC DMA),  
[www.ncdhhs.gov/dma](http://www.ncdhhs.gov/dma)

**NOTE:** If you receive Supplemental Security Income (SSI), you are already covered for North Carolina Medicaid.

## To Apply in Person

You may apply at your county's **Department of Social Services (DSS)** office. If you can, take the following items with you when you apply (if you do not have them, DSS can assist you in getting this information):

- Certified birth certificates or other proof of citizenship/alien status for each individual applying for Medicaid/NCHC
- Identity documents for each individual applying for Medicaid/NCHC
- Social security cards, social security numbers, or proof that you have made an application for a number from the Social Security Office, for each individual applying for Medicaid or NCHC
- A copy of all pay stubs for last month
- Copies of all medical or life insurance policies
- A list of all cars, trucks, motorcycles, boats, etc. you or anyone in your household own, including the year, make, model, and vehicle identification number (VIN) for each item
- Most recent bank statements
- A list of all real property you own
- Current financial statements/award letters from other sources of income, such as social security, retirement benefits, pensions, veteran benefits, and child support.



# North Carolina Health Choice (NCHC) for Children



## What is NCHC?

North Carolina Health Choice for Children is a free or reduced price health care program for North Carolina children. If your family makes too much money to be eligible for Medicaid but too little to afford other health care premium costs, your child or children may qualify for Health Choice.



## What does NCHC cover?

NCHC covers hospitalization and outpatient costs, including:

- Physician and clinic services
- Laboratory and radiology services
- Surgical services
- Prescription drugs
- Dental
- Vision
- Hearing
- Durable medical equipment and supplies (such as wheelchairs)
- Physical, Occupational, and Speech therapy
- Hospice care
- Home health care (limited)
- Inpatient and outpatient mental health services (requires precertification)
- Substance abuse treatment (requires precertification)

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## SOURCE:

[www.ncdhhs.gov/DMA/healthchoice/index.htm](http://www.ncdhhs.gov/DMA/healthchoice/index.htm)





# Organizations Helping People with Limited Resources

- **Community Care of North Carolina**  
Resources for the management of care for the Medicaid population in North Carolina.  
(919) 715-1453  
[www.communitycarenc.com](http://www.communitycarenc.com)

- **North Carolina Association of Free Clinics**  
Nonprofit organization that conducts advocacy, research, public relations, resource development, training, and technical assistance on behalf of free clinics in North Carolina  
(336) 251-1111  
[www.ncfreeclinics.org](http://www.ncfreeclinics.org)

- **North Carolina Community Health Center Association**  
Provides resource information and a directory/location information for community health centers in North Carolina.  
(919) 469-5701  
[www.ncchca.org](http://www.ncchca.org)

- **North Carolina Division of Medical Assistance**  
The mission of the NC Division of Medical Assistance is to provide access to high quality, medically necessary health care for eligible North Carolina residents through cost-effective purchasing of health care services and products.  
[www.ncdhhs.gov/dma](http://www.ncdhhs.gov/dma)



- **North Carolina Health Care Help**  
(a service of the North Carolina Institute of Medicine)  
Assists in finding free and reduced cost health services by area. Search for providers by location, hours of operation, insurance accepted, and service provided.  
[www.nchealthcarehelp.org](http://www.nchealthcarehelp.org)
- **North Carolina Health Choice for Children**  
NC Health Choice for Children is a free or reduced price health care program for children.  
[www.ncdhhs.gov/DMA/healthchoice/index.htm](http://www.ncdhhs.gov/DMA/healthchoice/index.htm)
- **North Carolina Partnership for Prescription Assistance**  
Offers point of access to more than 475 public and private assistance programs  
1-888-477-2669  
[www.ncpparx.org](http://www.ncpparx.org)

CONTINUED

## Organizations Helping People with Limited Resources, cont.

- **North Carolina's careLINK**  
Information on programs and services for North Carolina families, seniors, adults, and youth.  
[www.nccarelink.gov](http://www.nccarelink.gov)
- **Rx Assist**  
Informational website and database designed to help individuals find low cost or free medications.  
[www.rxassist.org/default.cfm](http://www.rxassist.org/default.cfm)
- **RxHope**  
(732) 507-7400  
[customerservice@rxhope.com](mailto:customerservice@rxhope.com)  
[www.rxhope.com](http://www.rxhope.com)
- **Technical Assistance Manual to help communities expand safety net providers from NC IOM**  
[www.nciom.org/pubs/safetynet\\_tam.pdf](http://www.nciom.org/pubs/safetynet_tam.pdf)



# North Carolina Free Clinics



For more information about free clinics, free clinic services, and locating a clinic, visit [www.ncfreeclinics.org](http://www.ncfreeclinics.org), or call 1-336-251-1111.

Free clinics provide medical care at little or no charge to low income, uninsured, and underinsured persons. North Carolina has more than 77 free clinics, more than any other state in the U.S. Free clinics are non-profit organizations in communities that depend largely on volunteer support.

Free clinics are located in the following N.C. counties:

- |              |                |
|--------------|----------------|
| ■ Alamance   | ■ Lincoln      |
| ■ Ashe       | ■ Macon        |
| ■ Bladen     | ■ Mecklenburg  |
| ■ Brunswick  | ■ Moore        |
| ■ Buncombe   | ■ Nash         |
| ■ Burke      | ■ New Hanover  |
| ■ Cabarrus   | ■ Onslow       |
| ■ Caldwell   | ■ Orange       |
| ■ Carteret   | ■ Pamlico      |
| ■ Catawba    | ■ Pasquotank   |
| ■ Chatham    | ■ Pitt         |
| ■ Craven     | ■ Richmond     |
| ■ Cumberland | ■ Robeson      |
| ■ Davidson   | ■ Rockingham   |
| ■ Davie      | ■ Rowan        |
| ■ Durham     | ■ Rutherford   |
| ■ Forsyth    | ■ Scotland     |
| ■ Franklin   | ■ Stanly       |
| ■ Guilford   | ■ Surry        |
| ■ Halifax    | ■ Transylvania |
| ■ Haywood    | ■ Union        |
| ■ Henderson  | ■ Wake         |
| ■ Iredell    | ■ Warren       |
| ■ Jackson    | ■ Watauga      |
| ■ Lee        | ■ Wayne        |

#### SOURCE:

North Carolina Free Clinics, [www.ncfreeclinics.org](http://www.ncfreeclinics.org)





A black and white photograph of a field of tall grass, possibly reeds or marsh grass, with a soft, hazy background. A green rectangular overlay is positioned in the lower right quadrant of the image, containing the text "Important Asthma Contacts" in white.

## **Important Asthma Contacts**





# Asthma Coalitions



## Alamance County Asthma Coalition

- **Initiatives:** Love My Lungs; Nebulizer Loan Program; Child Resource Guide
- **Contact Information:**  
Kenneth Greene,  
Environmental Health Specialist  
Alamance County Environmental Health  
(336) 570-6367, ext. 318  
Kenneth.greene@alamance-nc.com

## Albemarle Pediatric Asthma Coalition

(represents Pasquotank, Perquimans, Camden, Chowan, Currituck, Bertie, and Gates counties)

- **Initiatives:** Coaches' Clinics; Pinwheel Program at schools for World Asthma Day; Camp No Wheezin; asthma support groups; dispensing asthma medications to uninsured children
- **Contact Information:**  
Gayle Olson, RN  
Albemarle Regional Health Services  
Pediatric Asthma Care Manager  
(252) 338-4369  
golson@ppcc.dst.nc.us

## Alexander County Asthma Coalition

- **Initiatives:** Coaches Clipboard Project, First Aid Kit Project, Air Quality Flag Program
- **Contact Information:**  
Holly Powell  
(828) 632-9074

## Ashe County Asthma Coalition

- **Initiatives:** Working to install an air quality monitor atop Mt. Jefferson; Open Airways Program; Tools for Schools champion in each school; Inhaler policies to guide school staff
- **Contact Information:**  
Nancy Kautz  
landnrr@skybest.com

## Caldwell County – Healthy Caldwellians

- **Initiatives:** Coaches Clipboard Program, Cultural Competency Training
- **Contact Information:**  
Jan Pritchard  
Executive Director,  
Healthy Caldwellians  
(828) 426-8519  
healthycaldwellians@caldwellcountync.org

## Cleveland County Asthma Coalition

- **Initiatives:** Coaches' Clipboard project; Air Quality Flag program; Trigger House; Asthma Games; Nebulizer Loan Program; training for other coalitions
- **Contact Information:**  
Pam Ellwood, Co-chair  
Pam.Ellwood@clevelandcounty.com  
(704) 484-5182  
Anne Short  
Anne.Short@clevelandcounty.com

CONTINUED

## Asthma Coalitions, cont.

### Craven-Pamlico Asthma Coalition

- **Initiatives:** Asthma management education and support to children with asthma and their families; Asthma Management Workshop 16 times per year; cloth bags in participating local doctor's offices and health clinics, with allergen-barrier pillow covers, educational materials and forms, including asthma action plan, program referral form, and peak flow meter diary; kites for Asthma Day
- **Contact Information:**  
Debra Yarbrough, RS, Environmental Health Program Specialist,  
Craven County Health Department  
(252) 636-4936, ext. 3783  
dyarbrough@co.craven.nc.us

### Cumberland County Asthma Action Team

- **Initiatives:** Asthma Action Fair
- **Contact Information:**  
Holly Lawing, RRT, RCP, AE-C  
Pediatric Asthma Coordinator,  
Cape Fear Valley Health System  
(910) 609-4370  
hlawing@capefearvalley.com

### Dare County Asthma Coalition

- **Initiatives:** Fall 2008 Meeting scheduled for October 7, 2008 (info sent for Coalition Corner)
- **Contact Information:**  
Martha Jones, RN  
Dare County Department of Public Health  
(252) 441-8888, ext. 2206  
jonesma@dare.k12.nc.us

### Davidson County Asthma Coalition

- **Initiatives:** Started as a result of Coalition Building Project in Summer '06; looking to begin Coaches' Clipboard and Air Quality Flag program, as well as education in

schools and daycare centers; air quality flag program.

- **Contact Information:**  
Jen Hames, Health Education  
Supervisor/Health Promotion Coordinator,  
Davidson County Health Department  
(336) 242-2354  
jhames@co.davidson.nc.us

### Guilford County Asthma Coalition

- **Initiatives:** Asthma Education, Outreach to Physicians
- **Contact Information:**  
Diane Mueller  
dianemueller@triad.rr.com  
(336) 317-2263

### Harnett County Asthma Coalition

- **Initiatives:** Started as a result of Coalition Building Project in Summer '06; working on funding for Air Quality Flag program
- **Contact Information:**  
Jeanmarie Koehn, CRT/RCP  
vrcllc@aol.com

### Lee County Asthma Coalition

- First meeting held October 2007.
- **Contact Information:**  
Bonnie Bridges, RN  
Nurse Case Manager  
Sandhills Community Care Network  
(919) 219-5705  
bonniebridges@scena3.org

### Lenoir-Greene Asthma Coalition

- **Initiatives:** Brochure and some bookmarks. Want to start the kite program.
- **Contact Information:**  
Joy Brock, Health Educator II/Preparedness Coordinator  
Greene County Health Department  
227 Kingold Boulevard, Suite B  
Snow Hill, NC 28580  
(252) 747-8183  
jspence@co.greene.nc.us



## Asthma Coalitions, cont.

### Mecklenburg County Asthma Coalition

- **Initiatives:** Asthma Friendly Schools (working under grant from ALA). Carolinas Clean Air Coalition- air quality flag program.
- **Contact Information:**  
Cynthia Conner, RN, BSN  
Cynthia.Conner@carolinashealthcare.org  
(704) 355-7565, Pager 2765  
Jackie Butch, RN, MSN  
Jacquelyn.Butch@carolinashealthcare.org  
(704) 446-1508

### Moore County – Asthma is Moore Manageable

- **Initiatives:** “Educate the Educator: Understanding Asthma Care with Children;” promotion of child care asthma action plan (0-5 years); coming focus on emergency preparedness
- **Contact Information:**  
Lynn Agee, RN, BSN  
(910) 255-3648  
lagee@firsthealth.org

### New Hanover County Asthma Coalition

- **Initiatives:** Air Quality Flag Program, awareness day at baseball stadium, smoke free initiatives
- **Contact Information:**  
Erin Morrisette  
Tobacco Prevention Educator,  
New Hanover County Health Dept.  
(910) 798-6658  
emorrisette@nhcgov.com

### Pitt County Asthma Coalition

- **Contact Information:**  
Lisa Johnson, RRT, RCP, BAS  
(252) 847-6834  
lcjohnso@pcmh.com

### Union County Asthma Coalition

- **Initiatives:** Recently formed
- **Contact Information:**  
Jackie Butch, RN  
(704) 446-1508  
Jacquelyn.Butch@carolinashealthcare.org

### Wake County Asthma Coalition

- **Initiatives:** Planning spring kick-off (also for professionals)
- **Contact Information:**  
Debbie Godwin, RN  
WakeMed Pediatric Asthma Program  
Children’s Center  
3000 New Bern Avenue  
Raleigh, NC 27610  
(919) 350-7979  
DGODWIN@wakemed.org



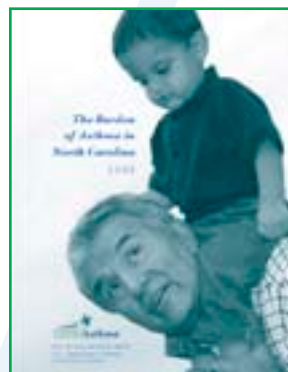
# North Carolina Asthma Program



Phone: (919) 707-5213  
[www.asthma.ncdhhs.gov](http://www.asthma.ncdhhs.gov)

## For asthma information, educational materials, and the following:

- The North Carolina Asthma Plan (2007 – 2012)
- The Burden of Asthma in NC Report
- School Asthma Action Plan
- Asthma Coalition Update newsletters
- Asthma Epidemiology Update newsletters
- Fact Sheets
- Asthma Education Curriculum for Child Care Providers
- Asthma Coalition Corner
- Information on NC Air Quality Forecasts
- Asthma Alliance of North Carolina (AANC) web page
- And More!!!





# Resource Organizations



## American Lung Association of North Carolina

- Resource information on programs and services offered to help people with asthma better manage their condition.  
(800) 892-5650  
(919) 832-8326  
[www.lungnc.org](http://www.lungnc.org)

## Better Breathers Clubs in North Carolina

- [www.lungusa.org/site/c.dvLUK9O0E/b.38104/k.2E83/Better Breathers Clubs in North Carolina.htm](http://www.lungusa.org/site/c.dvLUK9O0E/b.38104/k.2E83/Better_Breathers_Clubs_in_North_Carolina.htm)

## North Carolina Division of Aging and Adult Services

- Provides resource services and support including housing, long term care, nursing, health programs, caregiver support, legal rights, and employment for the aging population.  
(919) 733-3983  
[www.dhhs.state.nc.us/aging](http://www.dhhs.state.nc.us/aging)

## NC Health Info

- Information and resources on diseases and conditions; treatment; medications; and healthy living are available. Asthma and Asthma in Children may be selected as topics.  
NC Health Info Project Manager  
Health Sciences Library, CB #7585  
University of North Carolina at Chapel Hill  
Chapel Hill, NC 27599-7585  
[www.nchealthinfo.org](http://www.nchealthinfo.org)

## North Carolina Housing Coalition

- Non-profit membership organization working for decent, safe, and affordable housing that promotes self-determination and stable communities for low income North Carolinians.  
[www.nchousing.org](http://www.nchousing.org)

## North Carolina Occupational and Environmental Epidemiology Branch (OEEB)

- Works to protect public health through dealing with environmental and occupational conditions (such as asbestos, lead, mold, mildew, indoor air, chemicals, etc.) and dangers that may cause risks to human health.

## North Carolina Office of Minority Health and Health Disparities (OMHHD)

- Promotes the elimination of health disparities among all racial and ethnic minorities and other underserved populations in North Carolina.  
(919) 431-1613

CONTINUED

## Resource Organizations, cont.

### **North Carolina Tobacco Prevention and Control Branch**

- Provides information on ways to reduce the toll of tobacco use in N.C. communities and to promote tobacco free living.  
(919) 707-5400  
[www.tobaccopreventionandcontrol.ncdhhs.gov](http://www.tobaccopreventionandcontrol.ncdhhs.gov)

### **North Carolina Tobacco Use Quitline**

- Provides free, one-on-one support for people who are ready to quit smoking.  
1-800-QUIT-NOW (1-800-784-8669)  
[www.quitlinenc.com](http://www.quitlinenc.com)

### **University of North Carolina Environmental Resource Program (ERP)**

- The ERP is the outreach and public service unit of the UNC Institute for the Environment; it helps North Carolinians make informed decisions that protect the environment and public health.  
[www.ie.unc.edu/erp](http://www.ie.unc.edu/erp)

# Asthma Emergency Contact Information

Name \_\_\_\_\_

Address \_\_\_\_\_

Telephone Number \_\_\_\_\_

Doctor's Name \_\_\_\_\_

Doctor's Telephone Number \_\_\_\_\_

Doctor's Address \_\_\_\_\_

Hospital Name \_\_\_\_\_

Current Medicines \_\_\_\_\_

\_\_\_\_\_

Medicine Allergies \_\_\_\_\_

\_\_\_\_\_

Asthma History and Triggers \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

***If you need help right away, CALL 911!!!***









State of North Carolina • Beverly Eaves Perdue, Governor  
Department of Health and Human Services  
Lanier M. Cansler, Secretary  
Division of Public Health • North Carolina Asthma Program  
**[www.ncdhhs.gov](http://www.ncdhhs.gov)**

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10/09 ♻️